

**REMARKS**

The present response cancels claims 3, 5, 9, 24, and 25 without prejudice or disclaimer as to the subject matter recited therein. In addition, claims 1, 6, and 10 have been amended. Claims 1, 2, 4, 6-8, and 10-23 remain pending in the captioned case. Further examination and reconsideration of the presently claimed application are respectfully requested.

**Allowable Subject Matter**

Claims 12-17 and 23 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten into independent form including the limitations of the base claim and any intervening claims. While Applicants appreciate the Examiner's indication of allowable subject matter within these claims, it is believed that the claims are allowable in their present form.

**Section 103 Rejection**

Claims 1-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,888,825 to Liu (hereinafter "Liu") in view of U.S. Patent No. 6,049,540 to Chrin et al. (hereinafter "Chrin"). In addition, claims 10, 11, and 18-22 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,785,261 to Schuster et al. (hereinafter "Schuster") in view of U.S. Patent No. 5,581,790 to Sefidvash (hereinafter "Sefidvash"). Moreover, claims 24-25 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,497,373 to Hulen et al. in view of U.S. Patent No. 5,999,529 to Bernstein et al. Claims 24-25 have been canceled rendering rejection thereto moot.

To establish a case of *prima facie* obviousness of a claimed invention, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Second, there must be a reasonable expectation of success. As stated in MPEP 2143.01, the fact that references can be hypothetically combined or modified is not sufficient to establish a *prima facie* case of obviousness. See *In re Mills*, 916 F.2d. 680 (Fed. Cir. 1990). Finally, the prior art references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d. 981 (CCPA 1974); MPEP 2143.03. Specifically, "all words in a claim must be considered when judging the patentability of that claim against the prior art." *In re Wilson* 424 F.2d., 1382 (CCPA 1970). Using these standards, Applicant contends that the cited

art fails to teach or suggest all features of the currently pending claims, some distinctive features of which are set forth in more detail below.

**The combination of Liu and Chrin do not teach or suggest a plurality of multiplexers and a plurality of output data streams (claims 1 and 6), or that the plurality of data streams comprise time-division multiplexed (TDM) signals sharing a common clock and frame-sync timing (claim 1).** The present independent claims 1 and 6 not only recite a plurality of output data streams, but also specify that the output data streams comprise TDM signals that share a common clock and frame-sync timing. Contrary to independent claims 1 and 6, neither Liu nor Chrin make any suggestion of a plurality of output data streams formulated according to shift registers and multiplexers as recited in claims 1 and 6. Specifically, claims 1 and 6 define a certain type of output data stream based on a bit being selected from any of the various stages of the shift registers and inserted into that output. While Chrin discloses in general several output data streams 111 and 112 (Chrin – Fig. 1), the output data streams in Chrin are not the claimed output data streams formulated according to the present claims 1 and 6. The shortcomings of Chrin are compounded in Liu. Instead of describing a plurality of output data streams, Liu only describes a single output data stream sent to line card 100J (Liu – Fig. 2). Nowhere in Liu is there any mention of a plurality of output data streams, much less output data streams made up of various bits selected from different stages of any of a plurality of shift registers as presently claimed.

**The combination of Schuster and Sefidvash do not teach or suggest comparing first signal bits within a first data sequence received over a voice channel with second signal bits within a second data sequence received over the voice channel (claims 10 and 18), or replacing the first signal bits with the second signal bits if they differ (claims 10 and 18).** Present independent claims 10 and 18 each recite a comparison functionality, whereby first signal bits within a first data sequence received over a voice channel are compared with second signal bits within a second data sequence received over the voice channel. If the comparison yields a difference, then the first signal bits are replaced with the second signal bits. Neither Schuster nor Sefidvash make any mention of first signal bits received over a voice channel along with second signal bits also received over the voice channel. Moreover, neither Schuster nor Sefidvash make any mention of a comparison of first signal bits and second signal bits both received over the same voice channel. In fact, the Examiner admits on page 3 of the Office Action that Schuster does not teach comparing signal bits. The shortcoming of Schuster are compounded in Sefidvash. Sefidvash appears to make a comparison, however, the comparison is between a transmitted error detection code signature and an "internally generated EDC code" (Sefidvash -- col. 7, lines 32-36).

The internal EDC signature is not a set of bits sent over and received from a voice channel. Instead, the internally generated EDC code is as the name implies, an internal generated signature that is internal to and generated by EDC generator 28, and does not derive the claimed voice channel (Sefidvash – col. 6, lines 58-65; col. 7, lines 48-55).

In addition to lacking any suggestion for receiving first and second signal bits over a voice channel, neither Schuster nor Sefidvash make any mention of replacing the first bits with the second bits if, as a result of the comparison, they differ. In fact, if the so-called first and second bits are an EDC signature, error detection code associated with one set of bits cannot be replaced with error detection code from another set of bits since the whole purpose of EDC is to use the bits to determine if the payload has been accurately sent. If the EDC of one set is replaced with the EDC of another set, then no determination could be made on whether the transmitted payload is accurate. Any attempts to modify the purpose of EDC signatures by replacing one EDC signature with another would destroy the intent and purpose of the cited art, which is impermissible according to MPEP 2143.01. Therefore, such a hypothetical modification could not be achieved by one of ordinary skill in the art.

For at least the foregoing reasons, Applicant asserts that independent claims 1, 6, 10, and 18, as well as claims dependent therefrom, are patentably distinct over the cited art. Accordingly, Applicants respectfully request removal of this rejection.

### **CONCLUSION**

The present amendment and response is believed to be a complete response to the issues raised in the Office Action mailed July 12, 2005. In view of the remarks herein traversing the rejections, Applicant asserts that pending claims 1, 2, 4, 6-8, and 10-23 are in condition for allowance. If the Examiner has any questions, comments or suggestions, the undersigned earnestly requests a telephone conference.

No fees are required for filing this amendment; however, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 12-2252.

Respectfully submitted,

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